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COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Sub-Committee of Experts on the Transport of Dangerous Goods
(Twelfth session,
Geneva, 1-12 July 1996)

REPORT OF THE SUB-COMMITTEE OF EXPERTS ON ITS TWELFTH SESSION
(Geneva, 1-12 July 1996)

ATTENDANCE

1. The Sub-Committee of Experts on the Transport of Dangerous Goods held its twelfth session from 1 to 12 July 1996.

2. The session was attended by experts from the following countries: Argentina, Belgium, Brazil, Canada, China, France, Germany, India, Italy, Japan, Mexico, Morocco, Netherlands, Norway, Poland, Russian Federation, Sweden, United Kingdom, United States of America.

3. Observers from Australia, Austria, Finland, New Zealand, Nigeria, Portugal, South Africa, Spain and Switzerland participated in accordance with rule 72 of the rules of procedure of the Economic and Social Council.

4. Representatives of the United Nations Environment Programme (UNEP) and of the following specialized agencies also attended: International Labour Organization (ILO), International Maritime Organization (IMO) and the World Health Organization (WHO).

5. The following intergovernmental organizations were also represented: European Commission (EC), Central Office for International Carriage by Rail (OCTI), Organization for Economic Co-operation and Development (OECD), Committee of the Organization for Co-operation between Railways (OSZHD).

6. Representatives of the following non-governmental organizations: European Liquefied Petroleum Gas Association, European Chemical Industry Council (CEFIC), European Committee of Pain, Printing Ink Artists Colours Manufacturer's Associations (CEPE), The Oil Companies European Organization for Environment, Health and Safety (CONCAWE), European Fertilizer Manufacturers' Association (EFMA), European Industrial Gases Association (EIGA), European Portable Tank Association and Tank Container Association (EPTA/TCA), European Plastics Converters (EuPC), Hazardous Materials Advisory Council (HMAC), International Air Transport Association (IATA), International Confederation of Drum Reconditioners (ICDR), International Council of Intermediate Bulk Container Association (ICIBCA), International Federation of Pharmaceutical Manufacturers Associations (IFPMA), International Road Transport Union (IRU), International Organization for Standardization (ISO) and the European Secretariat Manufacturers of Light Metal Packagings (SEFEL) took part in the discussions on items of interest to their organizations.

ADOPTION OF THE AGENDA

7. The Sub-Committee adopted the provisional agenda prepared by the secretariat (ST/SG/AC.10/C.3/23 and -/Add.1), as amended to include papers submitted late (information documents INF.1 and INF.2).

ELECTION OF OFFICERS

8. The Committee of Experts at its eighteenth session had re-elected Mr. L. Grainger (United Kingdom) and Mr. J. Monteith (Canada), Chairman and Vice-Chairman respectively for the biennium 1995-1996 (ST/SG/AC.10/21, para. 197).

STATEMENT BY THE DIRECTOR

9. The Director of the Economic Commission for Europe's Transport Division, Mr. J. Capel Ferrer, welcomed participants. He informed the Sub-Committee that the preliminary analysis of existing activities of the ECE carried out by permanent missions of ECE Member States (see also ST/SG/AC.10/C.3/22, para.10) showed that the activities linked to the transport of dangerous goods (including those related to the work of the Committee and the Sub-Committee) were ranked in the top 10% highest valued programme elements of the ECE. He also said that in view of the increased workload of the dangerous goods unit, an additional staff member in the professional category had been allocated to that unit on a temporary basis for a three-month period.

10. He also underlined that this session was the last session of the Sub-Committee in the biennium and that it was necessary to bring all outstanding issues, including the work on the revision of the recommendations on the transport of dangerous goods in multimodal portable tanks, to a conclusion so that the outcome of the work could be submitted to the Committee at its nineteenth session from 2 to 11 December 1996. The programme of work for the next biennium would depend on the progress made at this session on key issues such as the work on portable tanks, the global harmonization of systems of classification and labelling of chemicals in the context of the follow-up to Chapter 19 of Agenda 21, and the reformatting of the Recommendations on the Transport of Dangerous Goods into a model rule.

11. He informed the Sub-Committee that a letter proposing to expand the cycle of amendments to the Recommendations on the Transport of Dangerous Goods from two to four years had been sent by the Secretary-General of the International Maritime Organization to the Secretary-General of the United Nations. Although the work of the Committee of Experts on the Transport of Dangerous Goods was not on the agenda of the Economic and Social Council for its 1996 substantive session, this letter had been submitted to the Council under the symbol E/1996/15.

12. The Sub-Committee also noted that, in reaction to that letter, IATA and HMAC had also conveyed their position on this matter to the Council (documents E/1996/63 and E/1996/NGO/1).

13. It was recalled that the issue had been discussed at the 1992 and 1994 sessions of the Committee and that no definitive conclusion could be adopted, and this had prompted the IMO secretariat to seek a solution directly at the Council level. The outcome of the discussion at the eighteenth (December 1994) session of the Committee had also been brought to the attention of the Council for information (E/1996/66).

14. Several delegations underlined that this matter was of a controversial nature and was being actively debated at national level, and that the various sectors of the industry concerned were still being consulted.

15. The Sub-Committee also noted that the ECE Working Party on the Transport of Dangerous Goods, aware of the submission of the IMO Secretary-General's letter to the Council at its 1996 session, had unanimously considered at its fifty-ninth session (6-10 May 1996) that the Economic and Social Council should wait until after consideration of the issue by the Committee of Experts on the Transport of Dangerous Goods before taking a decision.

16. The Sub-Committee, recalling that the matter would be on the agenda of the Committee at its nineteenth session (2-11 December 1996), possibly as a separate agenda item, and that it would have to be considered in the light of the various commitments of the Committee as regards reformatting of the Recommendations and in particular implementation of Chapter 19 of Agenda 21, unanimously recommended that no final decision should be taken by the Council in 1996 and that the matter should be deferred to the 1997 substantive session of the Council when the report of the Committee would be available.

17. The secretariat was invited to convey this recommendation to the Council without delay.

REVIEW OF CHAPTERS 12 AND 17

Report of the Working Group on Portable Tanks on its informal session (Atlanta, 25 to 30 March 1996)

Documents: ST/SG/AC.10/C.3/R.741 (United States of America and France)

18. The Chairman of the Working Group on Portable Tanks (Mr. B. Schulz-Forberg, Germany) introduced the Working Group's report. He recalled that the Group's work was to draw up rules which would govern the construction of portable tanks for the international multimodal transport of dangerous goods as from the year 1999 or 2000. For transport which was not of an international multimodal nature, however, it should be possible to keep in addition to those new rules different regional requirements which would not be covered by the United Nations Recommendations on the transport of dangerous goods. He noted the points to be discussed by the Sub-Committee before the Working Group met again.

Tank prising - Rationalized approach to assigning substances

Documents: **ST/SG/AC.10/C.3/R.776 (Germany)**
ST/SG/AC.10/C.3/R.618/Rev.1 (United States of America)

Informal document: **INF.22 (Netherlands)**

19. Several delegations took the view that the system for allocating substances to tank types (limited number of types and special requirements) proposed by the expert from the United States of America was simpler than that proposed by the expert from Germany, which involved identifying precisely by detailed coding (as for packagings) all the characteristics of a tank to be used for a specific substance.

20. The Sub-Committee was of the view that, in general, the principles of the two proposals were not contradictory and invited a drafting group to proceed, in cooperation with the Working Group on Portable Tanks, on the basis of annex 2 to document ST/SG/AC.10/C.3/R.618/Rev.1, taking into account document ST/SG/AC.10/C.3/R.776.

21. The outcome of the consideration by the drafting group, as reflected in annex 2 (see ST/SG/AC.10/C.3/24/Add.1), was endorsed by the Sub-Committee, for possible further discussion in the next biennium. The expert from Germany requested that document ST/SG/AC.10/C.3/R.776 should also be carried forward to the Committee session.

Reference to technical codes for the construction of pressure vessel

Document: **ST/SG/AC.10/C.3/R.765 (Germany)**

Informal document: **INF.28 (Germany)**

22. In accordance with the view expressed earlier by the Working Group, the expert from Germany proposed that, in the case of portable tanks to be used for the transport of non-refrigerated or refrigerated gases, the existing reference to technical codes recognized by the competent authority should be replaced by a reference to a list of technical codes currently in use and recognized internationally.

23. The expert from the United States of America opposed the proposal on the grounds that, in his opinion, the proposed codes had not all been shown to provide an equivalent level of safety to that of the ASME Boiler and Pressure Vessel Code.

24. In the absence of any compromise on the matter, the Sub-Committee decided to leave it to the competent authorities to decide on the code or codes which would be acceptable for portable tanks used in their respective countries.

25. The Sub-Committee noted that portable tanks for transporting gases constructed in accordance with a code other than the American ASME Code would not be accepted in the United States of America.

26. The Sub-Committee noted that the European Committee for Standardization was currently working on the question and requested the secretariat to invite ISO to look into the possibility of drawing up an international standard for pressure vessels which would be applicable to vessels intended for the transport of liquefied gases.

27. The expert from Germany said that he was not satisfied with the decision taken and asked for document ST/SG/AC.10/C.3/R.765 to be placed on the agenda of the Committee's session so that the question could be taken up again after it had been discussed within the European Union.

Safety coefficient

28. The expert from the United States of America pointed out that the safety coefficient of 1.3 used to determine the test pressure in relation to the maximum allowable working pressure for tanks designed for the transport of gases in the current paragraph 12.26.2 was different from the coefficient of 1.5 for tanks designed to carry liquids (see 12.4.2). He proposed that either it should also be raised to 1.5 or it should be deleted as the use of an appropriate standard for the design and construction of tanks made the requirement unnecessary.

29. Several delegations agreed that it would be sensible to have the same coefficient in both cases. Others argued that the 1.3 coefficient had been used for a long time and that no safety problem had been reported.

30. The expert from Germany said that a safety coefficient, whatever it might be, should be kept since the provision was a requirement which took precedence over standards.

31. A majority voted to retain the existing coefficient of 1.3 for tanks designed to carry non-refrigerated gases.

Safety relief device set pressure

Document: ST/SG/AC.10/C.3/R.762 (United States of America)

32. The proposal was referred to the Working Group as a basis for discussion, subject to amendments made necessary by the decision on the 1.3 safety coefficient.

Bottom openings

Document: ST/SG/AC.10/C.3/R.761 (United States of America)

33. The Sub-Committee decided to keep paragraph 12.7.2 in document ST/SG/AC.10/C.3/R.741 so that portable tanks intended for the transport of highly viscous or crystallisable solids would not be required to be fitted with internal shut-off devices (which had proved ineffectual with such substances).

34. The Working Group would have to take account of decisions regarding the definitions of highly viscous substances (see ST/SG/AC.10/C.3/22/Add.1, para. 19) taken earlier during the consideration of the rationalized approach for the allocation of substances (see paras. 19 and 20 above).

Use of the terms "Flame arrester" and "Flame trap"

Document: ST/SG/AC.10/C.3/R.777 (Germany)

Informal documents: INF.8 (United Kingdom) and INF.20 (Germany)

35. The Sub-Committee, noting the existence of various highly technical definitions of the term "flame arrester", which differed from one text or set of regulations to another, took the view that, for the purposes of the Recommendations, the term should be defined as broadly as possible, without

going into detail, in order to cover any protective device designed to prevent flame propagation in the venting duct of a tank.

Other proposals concerning chapters 12 and 17

Document: ST/SG/AC.10/C.3/R.723 (Argentina)

36. As items 1.1 and 2 of this proposal had already been considered by the Working Group on Portable Tanks, only items 1.2, 1.3 and 1.4 were referred to the Working Group for consideration.

Document: ST/SG/AC.10/C.3/R.783 (secretariat)

37. This document reproduced a letter from the Chairman of the IMO Working Group on Portable Tanks expressing fears that the decision to require a 4g impact test for portable tanks would force the Contracting Parties to the amended 1972 International Convention on Safe Containers (CSC) to amend the annexes to the Convention accordingly with respect to containers other than tank containers.

38. The Chairman of the Sub-Committee said that he did not believe that a revision of CSC would be necessary since portable tanks passing the 4g impact test would automatically satisfy the relevant requirements of CSC, which were less severe, and that, to his knowledge, no Government intended to ask for the extension of that requirement to containers other than tank containers.

Informal document: INF.23 (France)

39. The Sub-Committee agreed to add the French Railways (SNCF) C.N.E.S.T 002 - 1966 standard to paragraphs 12.19.3, 12.39.3 and 17.14.3 as an acceptable test procedure for the 4g impact test.

40. After a brief discussion, the following documents were referred to the Working Group on Portable Tanks: ST/SG/AC.10/C.3/R.728 (EPTA/TCA), -/C.3/R.729 (EPTA/TCA), -/C.3/R.772 (Belgium) (excluding section 4 which received no support), -/C.3/R.773 (Belgium), INF.15 (United States of America), INF.39 (Argentina) and INF.43 (EIGA).

Report of the Working Group on Portable Tanks

41. The Working Group on Portable Tanks met from 1 to 11 July, with the mandate to finalize the revision of Chapters 12 and 17.

42. The report of the Working Group as reproduced in annex 1 (see ST/SG/AC.10/C.3/24/Add.1), (including revised Chapters 12 and 17) was endorsed by the Sub-Committee.

43. The expert from Belgium considered that he had not had sufficient time to study the report and expressed a reservation on this endorsement. He was invited to submit written comments to the Committee if deemed necessary.

44. It was agreed that the revised Chapters 12 and 17 should be submitted to the Committee, and that the expert from the United States of America would prepare a reformatted version in accordance with the new structure.

45. The expert from the United States of America should also prepare a consolidated version of the dangerous goods list (Chapter 3.2 of the reformatted recommendations) based on the present lists of Table 12.1 and Table 12.2, including references to the relevant tank types and special tank provisions in accordance with the decisions made.

46. The chairman of the Working Group said that a revised version of Table 12.2 should also be prepared by the expert from Germany so that a complete revision of the existing chapters 12 and 17, according to the existing structure, could be made available to the Committee.

47. The expert from Germany said that he would prepare a list of solid and viscous substances which may be carried in tanks and for which the requirements of paragraph 12.7.2 should apply. He was invited to transmit that list to the expert from the United States of America as soon as possible, and to the secretariat before the deadline for submission of documents in the form of amendments to Table 12.2.

REFORMATTING OF THE RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Document: ST/SG/AC.10/C.3/R.736 (CEFIC)

48. The Chairman of the Working Group on the reformatting of the Recommendations on the Transport of Dangerous Goods, Mr. S. Benassai (Italy), introduced the Working Group's report on its informal session, held in Brussels from 18 to 20 March 1996 at the invitation of CEFIC.

49. The Sub-Committee adopted in general the amendments to document ST/SG/AC.10/C.3/R.700/Add.1 proposed in the report, subject to review by a drafting group and with the exception of paragraphs (6) and (7) of annex 5 which were to be deleted (see annex 3).

Document: ST/SG/AC.10/C.3/R.711 (Brazil)

50. The new structure proposed in that document concerning the section on IBCs was adopted after consideration of the corresponding document (ST/SG/AC.10/C.3/R.710) under agenda item 8 (see para. 109).

Documents: ST/SG/AC.10/C.3/R.712, -/C.3/R.713 and -/C.3/R.714 (United States of America)

51. The United States of America proposals on packing instructions for organic peroxides, self-reactive substances and infectious substances were adopted, subject to drafting amendments to avoid repetition of the requirements contained in the sections on general packing requirements (see annex 3). It should be noted that the packagings used for organic peroxides and self-reactive substances must meet the test requirements applicable to Packing Group II. However, such substances are not necessarily substances of Packing Group II, and no reference to Packing Group II should therefore appear in the list of substances (as in the case of explosives).

52. Notwithstanding the similarity between the packing instructions for organic peroxides and for self-reactive substances, it was decided to keep two separate sets of instructions for the time-being, one for Division 4.1 and the other for Division 5.2. The identification numbers of those instructions, consisting of the class/division number, are provisional and it will be possible to return to the question of the grouping of packing instructions - regardless of class - when the question of packaging as a whole has been considered for all classes.

Document: ST/SG/AC.10/C.3/R.720 (Argentina)

53. The Argentine proposal was not adopted as the question raised had already been dealt with at the previous session (see ST/SG/AC.10/C.3/22, annex 2, new section 1.8 on applicability).

Document: ST/SG/AC.10/C.3/R.734 (Belgium)

54. The proposed amendment to the table numbering system was adopted with some changes (see annex 3).

Document: ST/SG/AC.10/C.3/R.735 (Belgium)

55. The proposal on a new text for chapter 2.0 to replace the text adopted by the Working Group was referred to a drafting group for consideration and was adopted as amended by the drafting group (see annex 3).

Document: ST/SG/AC.10/C.3/R.738 (United States of America)

56. The proposed editorial amendments to the packing instructions for Class 1 were adopted in principle. The proposal to insert a reference to Packing Group II in the list of substances was not adopted (see also paragraph 51 above).

57. In reply to an observation by the representative of IMO on the need to review Class 1 of the IMDG Code because of the renumbering of packing instructions, it was pointed out that the amendment was purely a matter of drafting and therefore did not call for any immediate adjustment to modal regulations, particularly as there was a direct correlation between the two systems (EP01 = 101, EP44 = 144, etc.).

58. The remaining proposals, including the deletion of special provisions 253 to 265 and their insertion directly at the bottom of the packing instructions tables, were adopted.

59. A member of the secretariat said that he hoped that the decisions taken in the context of the reformatting would be decisions of principle, applicable to all classes of dangerous goods. The need to restore the special provisions in question in a future edition of the Recommendations should the experts responsible for examining packing methods for the other classes in the next biennium take a contrary decision should be avoided.

60. The expert from Italy pointed out that, in accordance with this decision, column (9) (Special requirements) in document ST/SG/AC.10/C.3/R.786, was no longer of great importance and could be deleted.

61. The Sub-Committee considered that the questions of principle raised by the secretary and by the expert from Italy were a matter for the Committee.

Document: ST/SG/AC.10/C.3/R.739 (United States of America)

62. The proposal to add a definition of competent authority was not adopted, mainly because the definition could vary from one set of regulations (national, international, modal) and from one country to another. The expert from the United States of America subsequently withdrew his proposal on the definition of "approval".

63. The proposal to add a new section for substances forbidden from transport was agreed in principle and referred to a drafting group (see annex 3).

Document: ST/SG/AC.10/C.3/R.743 (United States of America)

64. The proposals were considered by a drafting group, and the conclusions of that group, were adopted with minor modifications (see annex 2).

Document: ST/SG/AC.10/C.3/R.786 (United States of America)

65. The Sub-Committee took note of and welcomed the work done by the expert from the United States of America on the dangerous goods list. The document is to be reviewed in the light of the decisions taken at this session and presented at the session of the Committee.

Informal document: INF.6 (secretariat)

66. The expert from Germany introduced this document which contained the most recent version of the table of contents of the draft reformatted annexes to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) and the International Regulations concerning the Carriage of Dangerous Goods by Rail (RID). He noted that the reformatting of RID and ADR was being carried out in parallel with the reformatting of the United Nations Recommendations and that special care had been taken to model the new format on that to be used for the Recommendations. The reformatted texts would be considered on 18 September 1996 by the Joint Meeting of the RID Safety Committee and the Working Party on the Transport of Dangerous Goods at its next session (16-20 September 1996).

67. At the request of the Chairman, a member of the secretariat confirmed that countries which were not members of the Economic Commission for Europe but were Members of the United Nations could, if they wished to take part in the discussions on the reformatting of RID/ADR, be invited to participate in a consultative capacity in accordance with paragraph 11 of the Commission's terms of reference and rule 4 of its rules of procedure.

Informal document: INF.37 (CEFIC)

68. The proposal to use a dual page-numbering system (usual system and identification by part/chapter/chapter page as in the International Civil Aviation Organization (ICAO) Technical Instructions) was referred to the Committee. The experts will have to consider its advantages and disadvantages and the secretariat will have to assess the additional workload involved in dual pagination.

Informal document: INF.44 (CEFIC)

69. The CEFIC proposal to list all organic peroxides and self-reactive substances by name in the alphabetical index was not adopted. It was pointed out that a decision had been taken in 1988 to remove them from the index and to group them by alphabetical order in separate tables (sixth revised edition of the Recommendations). Any amendment of that principle would require justification in an official document, and account would have to be taken of the work involved in updating the whole index whenever a change was made to the list of peroxides.

REVIEW OF CHAPTER 15: DANGEROUS GOODS IN LIMITED QUANTITIES

Document: ST/SG/AC.10/C.3/R.669 (United Kingdom)

Informal document: INF.29 (Germany)

70. The expert from the United Kingdom withdrew his proposal on various aspects of the review of Chapter 15 (exempted goods, limited quantities, Packing Group I, explosives, consumer products, package marking) on the grounds that, although the item had been specifically included in the programme for the current biennium, the review would entail a study of basic principles which would really not be possible until the next biennium.

Documents: ST/SG/AC.10/C.3/R.719 (United States of America) (quantity limits for flammable liquids)

ST/SG/AC.10/C.3/R.740 (United States of America) (shrink-wrapped trays and fragile receptacles)

71. The proposals contained in these documents were adopted, with editorial amendments in the case of ST/SG/AC.10/C.3/R.740.

Document: ST/SG/AC.10/C.3/R.724 (Argentina)

72. The Argentine proposals were not adopted. The question of package marking would possibly be reviewed during the next biennium. It was not felt necessary to require special tests for packagings used for limited quantities, and the question raised in paragraph 3 had already been dealt with since it had been decided in principle to include maximum quantities in the dangerous goods table.

Document: ST/SG/AC.10/C.3/R.768 (United States of America)

73. The proposal to insert provisions on excepted quantities in the next edition of the Recommendations was not adopted. Although such provisions existed for air transport, a detailed in-depth study would be necessary before including them in the regulations for other modes.

Document: ST/SG/AC.10/C.3/R.778 (United States of America)

74. The proposal to simplify paragraph 15.2 and delete tables 15.1 and 15.2 as the quantity limits would in future be shown in the dangerous goods list itself was adopted (see annex 3). Some delegations found this decision regrettable as the principle underlying the authorization of carriage in limited quantities and the assignment of quantity limits would not be reflected in the model regulation. Other delegations took the view that those principles could be retained for information but not retained as part of the model rule.

75. The Sub-Committee also accepted the principle of exceptions to the general rule for special substances, i.e. not to allow carriage in limited quantities of some specific dangerous goods referred to in section 4 of document ST/SG/AC.10/C.3/R.778, with the addition of silanes (UN Nos. 1162, 1196, 1298 and 2985) (see annex 3). The Sub-Committee did not, however, adopt the proposal to prohibit carriage of gallium in limited quantities (applicable to air transport only), or the proposal on substances assigned to Packing Group II but described by the expert as meeting the inhalation toxicity criteria of Packing Group I. The Sub-Committee's view was that if the data of the expert from the United States of America were confirmed, those substances should be assigned to Packing Group I.

76. The proposal on UN No. 3269 (section 5) was adopted. The proposal on UN Nos. 1950 and 2037 (section 3) was not adopted, as the question of toxic aerosols could be dealt with in a special provision (see annex 3).

ROUTINE LISTING AND CLASSIFICATION

Classification of pesticides

Documents: **ST/SG/AC.10/C.3/R.717 (Switzerland)**
ST/SG/AC.10/C.3/R.718 (Switzerland)

Informal document: **INF.12 (United Kingdom)**

77. The Sub-Committee was informed of the publication of the 1996-1997 edition of WHO Recommended Classification of Pesticides by Hazard and Guidelines to Classification.

78. The observer for Switzerland, in documents ST/SG/AC.10/C.3/R.717 and -/C.3/R.718, and the expert from the United Kingdom, in informal document INF.12, made suggestions for establishing a closer correlation between the proper shipping names of pesticides in the United Nations Recommendations and the chemical types in column 4 of the WHO publication, in the light of the decision of principle to delete the list of pesticides from the United Nations Recommendations.

79. The expert from Germany said that the IMO Medical First Aid Guide would be simplified in future and that an exact correlation between the type of pesticide, the shipping name and medical measures in the event of an accident might no longer be necessary.

80. The Sub-Committee approved in general the suggestions made by the United Kingdom and Switzerland.

81. The representative of WHO said that he was ready to cooperate with the Committee and to amend the WHO publication to allow for a closer correlation between it and the United Nations Recommendations. It might be possible to include a section on transport classification criteria in the WHO publication, as well as a column showing the United Nations numbers to be used for each pesticide.

82. The representative of WHO stated that, notwithstanding the limited number of printed copies of the WHO publication and the copyrights, copies of the 1996-1997 edition would be made available to anyone on simple request. He also stated that governments would be authorized immediately to distribute photocopies to interested parties if they so requested in writing.

83. The expert from the United Kingdom was invited to set up a correspondence group comprising the expert from Switzerland, the ECE and WHO secretariats and HMAC, to submit specific proposals to the Committee.

Viscous flammable liquids

Documents: **ST/SG/AC.10/C.3/R.600 (CEPE)**
ST/SG/AC.10/C.3/R.652 (ICAO)

84. The CEPE document was a follow-up to the discussion of criteria for the inclusion of viscous flammable liquids in Packing Group III (ST/SG/AC.10/C.3/R.652, section 3; ST/SG/AC.10/C.3/22, para. 117). The Sub-Committee agreed to amend paragraph 5.6 (b) on the basis of the CEPE proposal (see annex 4).

73. The expert from the United States of America said that that decision did not resolve the difficulties referred to by ICAO and asked for document ST/SG/AC.10/C.3/R.652 to be referred once again to the Committee. That was agreed.

Classification based on human experience

Documents: **ST/SG/AC.10/C.3/R.650 (Argentina)**
ST/SG/AC.10/C.3/R.767 and -/Corr.1 (HMAC)

86. The HMAC proposal had been revised by its author during the session in order to extend the list of substances classified on the basis of human experience and to replace the proposed addition to paragraph 1.29 by a sentence exempting from the Recommendations substances contained in the list in chapter 2, except for those classified on the basis of human experience, and shown by tests not to meet the classification criteria for a given class or division. That proposal was supported by the expert from the United States of America.

87. The Sub-Committee noted that the expert from Argentina opposed this concept. Several delegations said that, while they might support the idea of identifying substances classified on the basis of human experience by a special provision, they were firmly opposed to the proposed addition which would mean allowing the chemical industry to decide for itself on exemptions of substances duly identified as dangerous goods in the list on the basis of test reports whose authenticity would be difficult to verify.

88. The representative of HMAC was invited to review his proposal in the light of the comments made and to prepare a new document for the session of the Committee.

Other regulated substances

Documents: **ST/SG/AC.10/C.3/R.684 (HMAC)**
ST/SG/AC.10/C.3/R.731 (Canada)
ST/SG/AC.10/C.3/R.770 (ICAO)

89. Several delegations supported the simplifying of the proper shipping names of UN Nos. 3334 and 3335 (deletion of the word "SUBSTANCE"). Opinions were divided, however, on the interpretation of those entries by special provision 276, in particular whether or not it is necessary to cover substances which, in the event of accidental spillage or leakage in a confined space, could give off a strong and penetrating odour.

90. As no ICAO representative was present and the matter concerned air transport only, it was decided to ask ICAO to review the matter and to submit a new complete document to the Committee at its next session.

Other proposals

Special Provision 216

Document: **ST/SG/AC.10/C.3/R.643 (United States of America)**

91. This proposal was submitted at the request of the ICAO Dangerous Goods Panel Working Group and came within the framework of the discussions on exemptions of small quantities. As the question of limited, exempted, etc. quantities had been postponed until the next biennium, the Sub-Committee took no decision on this document.

Classification of vanadium pentoxide (UN No. 2862)

Documents: **ST/SG/AC.10/C.3/R.651 and -/C.3/R.760 (United States of America)**

92. The data provided by the expert from the United States of America (LD_{50} of 467 mg/kg on ingestion) to justify a change of packing group did not convince the Sub-Committee, as the experts from Canada and the United Kingdom presented different data (LD_{50} of 10 mg/kg). The expert from the United States of America requested that document ST/SG/AC.10/C.3/R.651 and -/C.3/R.760 be referred to the Committee to allow exchange of technical information amongst experts.

93. The expert from the United States of America asked how, as a matter of principle, reclassification proposals were to be dealt with in future. The Sub-Committee was of the view that, where new data were contested, a detailed report should be provided in support of those data and, where possible, verifications made.

Classification of bromopropanes (UN No. 2344) and methylal (UN No. 1234)

Documents: **ST/SG/AC.10/C.3/R.608/Rev.1 (Belgium)**
ST/SG/AC.10/C.3/R.746 (Germany)

94. The expert from Belgium withdrew his proposal and it was confirmed that the minimum test pressure of tank containers for methylal was 4 bar.

95. The expert from Germany said that the flashpoints of bromopropanes were currently being verified in the United States of America, Belgium and Germany. The decision on document ST/SG/AC.10/C.3/R.746 was therefore postponed until the Committee session.

1-Pentol (UN No. 2705)

Document: **ST/SG/AC.10/C.3/R.727 (China)**

96. The Sub-Committee confirmed that the substance meant by the name "1-PENTOL" was 3-Methyl-2-pentene-4-ynol. That IUPAC name should be included in the alphabetical index as a synonym, in lower case type (see annex 4).

97. The Sub-Committee also decided to replace the name "AMYL ALCOHOLS" (UN No. 1105) by "PENTANOLS" (see annex 4).

Declassification of ethyl cyanoacetate

Documents: ST/SG/AC.10/C.3/R.695 and -/Add.1 (United States of America)

Subsidiary risk and labelling of pyrophoric organometallic and metal alkyl substances

Document: ST/SG/AC.10/C.3/R.754 (CEFIC)

UN Nos. 3076 and 3203: tank transport

Document: ST/SG/AC.10/C.3/R.755 (CEFIC)

Nitrogen trifluoride

Document: ST/SG/AC.10/C.3/R.759 (United States of America)

New refrigerant gases

Document: ST/SG/AC.10/C.3/R.774 (United States of America)

Acetic acid in tanks

Informal document: INF.32 (United Kingdom)

98. The proposals contained in the documents listed above were adopted (see annex 4).

New entries for hazardous wastes subject to the Basel Convention

Document: ST/SG/AC.10/C.3/R.769 (Germany)

99. The proposal to insert in Class 9 specific entries for hazardous wastes subject to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal received no support. Such wastes could in fact be carried under the appropriate entries of Classes 1 to 9 including entries 3077 and 3082 for environmentally hazardous substances although the word "waste" must appear in the transport document.

Listing of thiourea dioxide

Informal document: INF.30 (United States of America)

100. In view of the various accidents which had occurred during the carriage of this substance, and the confirmation by CEFIC and the experts from Germany and the United States of America that it met the criteria for Division 4.2, the Sub-Committee introduced a new entry for thiourea dioxide (see annex 4).

Classification of sodium nitrite (UN 1500)

Informal document: INF.46 (United States of America)

101. Several experts confirmed that despite its use as a food additive, this substance met the criteria for classification in Division 6.1, packing group III, and a subsidiary risk label 6.2 was therefore prescribed (see annex 4).

Classification of nitric acid (UN 2031)

Informal document: INF.45 (United States of America)

102. The expert from the United States of America pointed out that no Division 5.1 subsidiary risk label was required for it although in accordance with the new criteria for liquid oxidizing substances, this substance, in an aqueous solution of 65%, was the reference substance for classification in Division 5.1 (see para. 11.2.3.2.2). Since a concentration of 70% defined packing groups II and I with reference to corrosivity, he proposed for practical reasons that subsidiary risk 5.1 should be assigned to substances classified in packing group I from the point of view of corrosivity. This proposal was adopted. To be logical, it would be appropriate in the future to verify whether this concentration of 70% could be used to define the reference substance for classification in Division 5.1.

Revised data sheet for substances submitted to the United Nations for new or amended classification (Figure 1.1 of the Recommendations)

Informal document: INF.3 (Netherlands)

103. The expert from the Netherlands proposed to introduce changes in Figure 1.1 to take account of the new criteria for Classes 4 and 5 as reflected in the Manual of Tests and Criteria. He was invited to submit an official proposal for a fully revised data sheet to the Committee; this proposal should take account of the numbering of paragraphs in the reformatted recommendations.

INFECTIOUS SUBSTANCES

Biological products

Document: ST/SG/AC.10/C.3/R.766 (HMAC)

Informal document: INF.19 (WHO)

104. The proposal by HMAC was adopted with some drafting amendments (see annex 4).

Packagings containing dry ice

Document: ST/SG/AC.10/C.3/R.667 (United Kingdom)

105. The proposals by the United Kingdom were adopted with an amendment to paragraph 6.13.3 (b) (ii) proposed by the expert from the United States of America (see annex 4).

PACKAGINGS AND INTERMEDIATE BULK CONTAINERS (IBCs)

Applications for accreditation

Documents: ST/SG/AC.10/C.3/R.756 and -/C.3/R.757 (Secretariat)

106. The application by the International Council of Intermediate Bulk Container Associations (ICIBCA) for consultative status was accepted.

107. The application presented by the European Plastics Converters (EuPC) was not accepted. The Sub-Committee considered that the organization represented interests that were basically regional, and it would be preferable for it to join up with other organizations, particularly in North America and Asia, to represent the standpoint of the plastics converter industry worldwide.

Definitions and criteria for the tightness of packages and IBCs

Documents: ST/SG/AC.10/C.3/R.552 (Germany)
ST/SG/AC.10/C.3/R.722 (Argentina)

108. The expert from Germany said that the European Committee for Standardization (CEN) (Technical Committee TC 261) was working on the question and that it would be preferable to await its conclusions before taking a decision. The german document was referred back to the Committee's agenda.

Editorial review of chapter 16

Documents: ST/SG/AC.10/C.3/R.710 and -/C.3/R.711 (Brazil)
ST/SG/AC.10/C.3/R.715 (Argentina)

109. The proposals by Brazil were adopted with some amendments (see annex 4). The proposals by Argentina were not adopted.

Metal IBCs: design specification requirements

Document: ST/SG/AC.10/C.3/R.716 (United Kingdom)

110. Several delegations supported the idea of a design for metal IBCs based on standard performance requirements rather than on material specifications or wall thickness. Other delegations thought on the contrary that there should be a minimum wall thickness requirement for metal IBCs, in particular because of the risk of perforation in the event of an impact and the fact that it was permitted to use these IBCs for the carriage of particularly dangerous substances.

111. The Sub-Committee finally decided not to accept the proposal to delete the requirement for minimum wall thickness and only the proposal to delete marginal 16.2.3.2 was adopted (see annex 4).

Large packagings

Document: ST/SG/AC.10/C.3/R.763 (United Kingdom, Germany, Norway and Sweden)

112. A lengthy discussion took place on the new concept of large packagings which contained inner packagings or articles. The expert from the United Kingdom took note of the comments made and invited all experts who wished to make further comments to transmit them to him by 1 September in order that a revised proposal could be presented to the Committee.

Periodic tests and inspection of IBCs

Informal document: INF.14 (United States of America)

113. The expert from the United States of America put forward a proposal to permit the carriage of empty uncleaned IBCs after the expiry date of the last periodic test so that they could undergo the test. Most of the experts said that they supported the principle, but it was considered that additional provisions should be made (e.g. limiting the period).

114. The expert from the United States of America was invited to submit a further proposal to the Committee taking account of the comments made. He said that he did not necessarily share all the opinions expressed.

Stacking test: elimination of the stability criterion

Document: ST/SG/AC.10/C.3/R.779 (Germany)

115. The Sub-Committee agreed to delete the last sentence but one of paragraph 9.7.6.3 (see annex 4).

Reuse, reconditioning and remanufacturing of IBCs

Document: ST/SG/AC.10/C.3/R.780 (Germany)

116. After an exchange of views on the document submitted by Germany, the Sub-Committee deemed it preferable to ask the Committee to consider whether the question should be included in the programme of work for the next biennium.

Requirements for pressure release for IBCs

Document: ST/SG/AC.10/C.3/R.781 (Germany)

117. Several experts said that they were not in favour of the proposal by the expert from Germany. After a discussion, the expert from Germany confirmed that he would submit a revised proposal to the Committee at its next session.

Use of recycled plastics material in plastics drums and jerricans

Document: ST/SG/AC.10/C.3/R.784 (CEFIC)

Informal documents: INF.5 (Belgium)
INF.17 (CEFIC)
INF.38 (ICDR)

118. The proposals contained in these documents followed on from the adoption of provisions concerning the use of recycled materials for the manufacture of plastics drums and jerricans (see ST/SG/AC.10/C.3/22, paras. 143 to 148 and annex 2). Where the quality assurance programme was concerned, CEFIC proposed additional verification measures concerning the modulus of elasticity, tensile creep modulus, notched impact strength and environmental stress cracking resistance.

The expert from Belgium recommended that the definition should be restricted to material recycled from used industrial drums coming from a closed and controlled manufacturing and use system so as to guarantee familiarity with the properties of the recycled material.

119. After a lengthy discussion on the question, CEFIC's proposals were not adopted. The Sub-Committee adopted a compromise text proposed by ICDR with amendments suggested orally by the expert from Belgium (see annex 4). It was decided, however, as CEFIC had proposed, to transfer the sentence concerning the "REC" marking to paragraph 9.6.7.2 rather than 9.6.7.1, since the latter paragraph was also applicable to the inner receptacles of composite packagings, in accordance with paragraph 9.6.18.1.1.

Paper bags intended for the carriage of carbon of vegetable origin (UN 1361)

Informal document: INF.42 (Argentina)

120. The proposal to permit the carriage of carbon of vegetable origin in two-ply paper bags was not adopted, since, by definition, 5M1 paper bags had at least three plies (see 9.6.17.1).

ISO WORK ON STANDARDS FOR GAS CYLINDERS AND QUALITY ASSURANCE

Information document: INF.18 (ISO)

121. The representative of ISO submitted a report on the progress made by Technical Committee ISO/TC 58 in its work on gas cylinders and quality assurance programmes.

MATTERS RELATED TO EXPLOSIVE SUBSTANCES AND ARTICLES

Classification criteria and test methods

Impact sensitivity and susceptibility to propagation of an explosion in a mass of explosive

Document: ST/SG/AC.10/R.499 (Russian Federation)

Informal document: INF.33 (Russian Federation)

122. The expert from the Russian Federation withdrew the two documents.

Review of criteria for assignment to Class 1 - Test 6 (e)

Documents: ST/SG/AC.10/C.3/R.529 (OECD-IGUS)
ST/SG/AC.10/C.3/R.641 (United States of America)
ST/SG/AC.10/C.3/R.613 and -/Rev.1 (France)
ST/SG/AC.10/C.3/R.705 (United States of America)
ST/SG/AC.10/C.3/R.602, -/Add.1, -/Add.2 and -/Add.1/Corr.1 (Canada)
ST/SG/AC.10/C.3/R.737 (France)

Informal document: INF.9 (HMAC)

123. Members were reminded of the discussions on this question at the tenth session of the Sub-Committee, and the Sub-Committee's conclusions (see ST/SG/AC.10/C.3/20, paras. 50 to 54 and annex 2).

124. Several delegations once again stressed their interest in the revision of test 6 (c) because of the lack of precision, clarity and cohesion of this test method. Other delegations hoped that the work would not lead to a substantive calling in question of current classifications and that, once revised, the method would be simple and easy to perform.

125. Several delegations were not in favour of amending the Manual of Tests and Criteria as from late 1996, and it was calculated that in any case it would be difficult to complete the work during the present biennium.

126. The expert from Canada proposed that a group of interested experts should meet in Florida from 26 to 28 September 1996. Several experts expressed their intention of taking part and the group was therefore entrusted with the task of preparing for the Committee a detailed programme of work for the next biennium which would enable the revision to be completed for the Committee's 1998 session. The expert from Canada volunteered to act as rapporteur during this period.

Classification acceptance procedure for Class 1 dangerous goods

Document: ST/SG/AC.10/C.3/R.733 (China)

127. The expert from China had proposed the revision of figure 10.2 of the Manual of Tests and Criteria in order to bring the sequence of boxes in the decision-making diagram into line with the order in which the tests were carried out in practice, particularly in the case of the series 3 tests which were usually made before those of series 1 in accordance with paragraph 10.3.3.3 of the Manual.

128. The Sub-Committee agreed to insert a footnote concerning box 3 to the effect that a start could be made on the series 2 tests for classification purposes and to specify in boxes 1 and 14 that these were substances or articles for classification (see annex 5). It did not, however, agree to modify the sequence of the boxes.

129. The Chairman asked the expert from the United Kingdom to check the text of paragraph 10.3.3.3 to ensure the necessary concordance.

Classification of air bag inflators, air bag modules and seat-belt pre-tensioners

Document: ST/SG/AC.10/C.3/R.744 (Germany)

130. This proposal to provide possibilities of classification in Class 9 for some of those articles which were normally classified as 1.4G received no support. However, some experts acknowledged that problems of mixed packing and mixed loading of different types of such articles exist in practice.

New provisions relating to over-sized packagings

Document: ST/SG/AC.10/C.3/R.601/Rev.1 (Germany, Norway, Sweden and United Kingdom)

131. The proposals contained in this document to authorize, in addition to the cradles, crates or other handling devices already authorized in paragraph 4.8.2.14, storage and launching devices for the carriage of large robust articles, were slightly amended and adopted (see annex 4).

132. The expert from France expressed concern about this decision since in his opinion the intention of this proposal was to authorize the transport of missiles on their launching ramps although, unlike bombs or shells, missiles could not be regarded as robust articles.

Separation of goods of Class 1

Document: ST/SG/AC.10/C.3/R.603 and -/Add.1 (HMAC)

133. Although it received support from several delegations, the proposal to authorize the mixed loading of articles of compatibility groups C, D, E and G was not adopted as drafted. The representative of HMAC pointed out that paragraph 4.6.4 of the Recommendations provides that the matter could be settled independently for each mode of transport. The mixed loading arrangement proposed by HMAC is authorized in ADR and the IMDG Code, but not in the ICAO Technical Instructions and HMAC proposed that the Recommendations be revised to correspond with ADR and the IMDG Code. Comments that the HMAC proposal was too broad were made and the representative of HMAC said that he would consider these comments and submit a new document in the next session of the Sub-Committee.

MATTERS RELATED TO REACTIVE SUBSTANCES

Document: ST/SG/AC.10/R.460 (Germany)

134. This document was withdrawn by the expert from Germany as being no longer topical.

Entries for desensitized substances of Division 4.1

Documents: ST/SG/AC.10/C.3/R.604 (Germany)
ST/SG/AC.10/C.3/R.605 (Germany)
ST/SG/AC.10/C.3/R.606 (Germany)
ST/SG/AC.10/C.3/R.725 (Germany)

Informal document: INF.13 (HMAC)

135. The expert from Germany introduced the amendments for document ST/SG/AC.10/C.3/R.725 prepared by a drafting group which had considered the various proposals.

136. Several delegations said that they would like to be able to study the implications of the proposals made by the drafting group on the basis of a written document and asked that the decision should be postponed.

137. The Sub-Committee requested the drafting group to reconsider the matter in the light of the various comments made and to prepare draft proposals in writing. Several experts opposed the proposed classification in Class 3, out of which was the discrepancy with the preceding of hazard table by the Sub-Committee (see annex 4). Document ST/SG/AC.10/C.3/R.725 was carried forward to the Committee session as the drafting group could not resolve the question of an entry for nitroglycerin mixtures, desensitized, liquid, non-flammable, n.o.s., with not more than 30% nitroglycerin by mass.

Classification of xanthates

Documents: **ST/SG/AC.10/C.3/R.685 (Germany)**
ST/SG/AC.10/C.3/R.685/Add.2 (Canada/Australia)
ST/SG/AC.10/C.3/R.750 (South Africa)

Informal document: **Test result transmitted by the expert from Canada**

138. On the basis of the information provided, the Sub-Committee decided to include a new entry for xanthates, Division 4.2, packing group II or III (see annex 4).

Amendments to Table 11.4

Document: **ST/SG/AC.10/C.3/R.742 (United States of America)**

139. The proposal by the United States of America was adopted (see annex 4).

Protection against the risk of explosion

Document: **ST/SG/AC.10/C.3/R.751 (CEFIC)**

140. The proposed amendments to paragraphs 11.3.10.6 (c) and (e) were adopted (see annex 4).

Control temperature requirements for organic peroxides

Document: **ST/SG/AC.10/C.3/R.752 (CEFIC)**

141. The first proposal concerning the definition of the type of organic peroxide for which temperature control was required was adopted (see annex 4); however, the second proposal concerning a new method of calculating the control temperature setting was not adopted.

Transport of organic peroxides in IBCs and tanks

Document: **ST/SG/AC.10/C.3/R.753 (CEFIC)**

142. The proposal by CEFIC was intended to specify clearly under what conditions each organic peroxide listed in tables 11.4 and 11.5 was authorized for carriage in IBCs or tanks, as was not currently the case since those tables did not reflect all the appropriate data contained in the test reports which had given rise to their registration.

143. The majority of delegations preferred not to leave the tables for organic peroxides unencumbered, as they were already quite complicated. CEFIC's proposals as submitted were not adopted.

144. The Sub-Committee did, however, admit that it would be useful to specify generally that a number of precautions should be taken to ensure compatibility between the properties of the organic peroxide (self-accelerating decomposition temperature, etc.), the type of IBC or the tanks to be used and their equipment, and as a result adopted a general text (see annex 4).

Determination of flammability of organic peroxides

145. A new paragraph 11.3.6, proposed by the expert from Germany concerning the determination of the flash point of organic peroxides was adopted (see annex 4).

IMPLEMENTATION OF AGENDA 21

Documents: ST/SG/AC.10/C.3/R.747 (Australia)
(Report on the second session of the Intersessional Group of the Intergovernmental Forum on Chemical Safety (ISG 2))

Informal document: INF.47 (Australia)

146. The observer from Australia introduced the report of ISG 2 and a document on the intended scope of the work on harmonization of systems of classification and labelling of hazardous chemicals.

147. The representative of ILO recalled that the Intergovernmental Forum on Chemical Safety would meet in Ottawa from 10 to 14 February 1997 and would discuss the various options for the implementation of the work on harmonization (development of a recommendation or of a binding instrument). The report of the Intergovernmental Forum on Chemical Safety will be submitted to the Commission on Sustainable Development (CSD) in March 1997 and the CSD will prepare a report on the implementation of Agenda 21 for the General Assembly session in 1997.

Harmonized classification criteria for reactive substances

Documents:
ST/SG/AC.10/C.3/20/Add.2 (Report of the Working Group during the tenth session)
ST/SG/AC.10/C.3/22/Add.2 (Report of the Working Group during the eleventh session)
ST/SG/AC.10/C.3/R.610/Rev.2 (United Kingdom)
ST/SG/AC.10/C.3/R.663/Rev.1 (United Kingdom)
ST/SG/AC.10/C.3/R.672/Rev.1 (CEFIC)
ST/SG/AC.10/C.3/R.706 (Netherlands)
ST/SG/AC.10/C.3/R.709 (Germany)
ST/SG/AC.10/C.3/R.712 (Canada)
ST/SG/AC.10/C.3/R.743 (Germany)
ST/SG/AC.10/C.3/R.749 (Germany)
ST/SG/AC.10/C.3/R.758 (Japan and Netherlands)
ST/SG/AC.10/C.3/R.775 (EC)

Informal documents:
INF.4 (United Kingdom)
INF.10 (OECD-IGUS)
INF.11 (OECD-IGUS)
INF.31 (United States of America)
INF.34 (Germany)
INF.35 (Germany)

148. Consideration of these documents was assigned to a working group established in the context of the cooperation with ILO and the Inter-Organization Programme on Sound Management of Chemicals (IOMC Programme) and follow-up to the United Nations Conference on Environment and Development (see ST/SG/AC.10/21 paras. 144 to 154 and ECOSOC Resolution 1995/6).

The Working Group was chaired by Mr. R. Woodward (United Kingdom) and met on 9 July 1996. The report is reproduced as annex 6 in document ST/SG/AC.10/C.3/24/Add.3.

149. At the end of the Working Group session, it was realized that certain issues concerning reactive substances could not be resolved by consensus at this session, and that a comprehensive set of harmonized classification criteria could not be transmitted to the International Forum on Chemical Safety.

150. The representative of ILO expressed regrets at this situation, and said that the ILO would probably make a request through IFCS to the Economic and Social Council that the Committee of Experts consider continuing this work during the next biennium.

151. A member of the secretariat said that the programme of work for the next biennium would be determined by the Committee at its December 1996 session and would be proposed to the Council. Therefore, it might be more appropriate for ILO to make such a request to the Committee itself, so that an appropriate provision may be included in the draft programme of work subject to endorsement by the Council if a recommendation to that effect is made by IFCS. He also emphasized that matters which cannot be resolved by consensus by the Committee are normally resolved by vote in accordance with the rules of procedures of the Council, which apply to the proceedings of the Committee. Therefore, if IFCS decided not to resolve such issues and preferred to refer them back to the Committee, it might be appropriate to consider to apply the Council Rules of procedures in the next step.

152. The Chairman confirmed that it might be appropriate to seek authority from the Council to allow the Committee to assist ILO to develop their recommendations to IFCS in accordance with the Council rules of procedures when no consensus can be reached.

153. The representative of the Netherlands informed the Sub-Committee that work was going on in a OECD/IGUS Working Group but it would not be possible to complete the work in this biennium and it should therefore be deferred to the next biennium. He would submit a new proposal for the Committee. In this light ST/ST/AC.10/C.3/R.706 and -/C.3/R.758 were withdrawn . The expert from Japan supported his comments.

154. The expert from the United Kingdom withdrew document ST/SG/AC.10/C.3/663/Rev.1 and would prepare a new paper. Informal documents INF.4 and INF.31 were also withdrawn.

155. Document ST/SG/AC.10/C.3/R.732 concerning water-activated corrosive substances was deferred to the Committee session.

Harmonized classification criteria for flammable substances

Documents: **ST/SG/AC.10/C.3/26/Add.2**
ST/SG/AC.10/C.3/12/Add.1
ST/SG/AC.10/C.3/2.590 (United States of America)
ST/SG/AC.10/C.3/R.659 (Argentina)
ST/SG/AC.10/C.3/R.721 (Argentina)
ST/SG/AC.10/C.3/R.730 (Canada)
ST/SG/AC.10/C.3/R.748 (Secretariat-CONCAWE)
ST/SG/AC.10/C.3/R.764 (United Kingdom)
ST/SG/AC.10/C.3/R.785 (Japan)

156. A working group met on 10 July 1996 under the chairmanship of Mr. G. Oberreuter (Germany) to consider these documents. The report of the Working Group is reproduced as annex 7 in document ST/SG/AC.10/C.3/24/Add.3.

158. The outcome of the work of the two Working Groups (reactivity/flammability) should be condensed in comprehensive documents to be prepared by the chairmen of the working groups for final consideration at the Committee session before transmission to ILO.

Harmonized classification criteria for toxicity

Documents: **ST/SG/AC.10/C.3/R.467 (United States of America)**
ST/SG/AC.10/C.3/R.519 (OECD)
ST/SG/AC.10/C.3/R.533 (EC)
ST/SG/AC.10/C.3/R.691 (Germany)

Informal document: **INF.27 (OECD)**

158. The representative of OECD informed the Sub-Committee that the European Commission had decided not to cooperate any further with his organization in the process of harmonization of classification criteria for toxicity with the result that not all end points concerning toxicity have been resolved, and that the European Commission envisaged resolving those end points by direct bilateral negotiations with the government of the United States of America in October 1996. In view of this situation, the OECD had suspended its activities in that field and would not consider the question of acute toxicity for the time being.

159. Several delegations expressed concern at that situation and wondered whether OECD was the appropriate forum for the global harmonization process if decisions could not be made on a true multilateral basis.

160. The expert of Germany recalled that several endpoints had already been resolved and regretted that the entire process was now blocked when it would have been possible to present certain results to the IFCS.

161. The representative of the European Commission explained that for her organization, health effects had to be considered all together and decisions could not be made separately on specific endpoints.

Harmonized classification criteria for corrosivity

162. The representative of OECD said that some progress had now been made by his organization in that field. Certain experts regretted that the Sub-Committee had not been associated in this work as it had been for toxicity, and expressed the wish to be kept informed so that the Sub-Committee position on the issue and development may be transmitted to OECD at the appropriate time. The representative of OECD said that the next session of the relevant OECD body is scheduled for 14 and 15 November 1996 and that he would present an information paper to the Committee at its December session.

163. The Sub-Committee noted that the criteria developed by OECD concerned corrosion to biological tissues only and not corrosion to metals. Certain experts suggested that the UN Recommendations criteria for corrosion to metals could be used in the harmonized approach. The representation of CEFIC warned that this area of work could be difficult as corrosion to metals is mainly relevant to process safety and many situations would have to be considered (including corrosion according to the type of metal).

Harmonized classification criteria for danger to the environment

Documents: **ST/SG/AC.10/C.3/R.473 (Germany)**
ST/SG/AC.10/C.3/R.589 (OECD)
ST/SG/AC.10/C.3/R.635 (United Kingdom)
ST/SG/AC.10/C.3/R.661 (Argentina)
ST/SG/AC.10/C.3/R.664 (United Kingdom)
ST/SG/AC.10/C.3/R.707 (Argentina)
ST/SG/AC.10/C.3/R.708 (Netherlands

Informal documents: **INF.24 (IMO)**
INF.25 (OECD)
INF.26 (OECD)

164. The representative of IMO informed the Sub-Committee of the progress made by the Working Group on the Evaluation of Hazards of Harmful Substances carried by Ships of the Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP) in its efforts to revise its criteria as a contribution to the global harmonization process. The Sub-Committee commended the Working Group and its secretariat for its cooperation and positive contribution.

165. The representative of OECD presented, in informal documents INF.25 and INF.26, the progress made by his organization in this area.

166. Several experts emphasized that the OECD reports included references to the possible application of criteria through transport regulations when these had not yet been either discussed or agreed by the Sub-Committee. It was felt in general that the application of the harmonized classification criteria developed by OECD to transport regulatory systems should be left to the competence of the Sub-Committee. Questions such as pollution depending on the amount of polluting substances released from a package, container or any transport unit were not related to the intrinsic properties of the substances and needed to be considered separately by the different regulatory systems.

167. The representative of OECD informed the Sub-Committee that the next discussion of the subject would take place at OECD Headquarters in Paris on 26 and 27 September 1996. The chairman encouraged members of the Sub-Committee to participate in that important session.

168. Following a remark by the expert of the Netherlands the representative of OECD said that the last column of the table of INF.25 concerning transport regulation systems should be deleted.

Informal document: INF.40 (Argentina)

169. The proposal by Argentina to supplement the model data sheet in the Recommendations with a section containing data relevant to pollution criteria was not adopted as this question should be raised only once the criteria are known.

Labelling and hazard communication systems

Document: ST/SG/AC.10/C.3/R.726 (Germany)

170. The expert from Germany proposed to authorize the use of primary risk labels for subsidiary risks, in order to simplify consignment procedures. Several experts supported the proposal, as they felt that the requirements for two types of labels for identifying primary and subsidiary risks was a significant burden for consignors and were not really justified from the safety standpoint, and in fact were not applicable in user safety regulations. Other experts, on the contrary, considered that the differentiation between the primary risk and the subsidiary risk is very important for emergency response and were opposed to such a relaxation. It was also mentioned that it might not be appropriate to amend the existing recommendations before completion of the work on the global harmonization of labelling and hazard communication systems. The proposal was not adopted.

Document: ST/SG/AC.10/C.3/R.782 (New Zealand)

171. The observer of New Zealand mentioned that the transport of dangerous goods regulations in certain countries require that the colour of labels meet very precise technical specifications, and these specifications, which differ from country to country, may constitute trade barriers. Therefore, he proposed to include typical colour specifications in the Recommendations.

172. Several experts supported the idea of more precise specifications, but it was also underlined that such a work would take time as several factors have to be taken into account (ageing of colour pigments, compatibility of pigments with the environment, ISO work on the subject).

173. Although it was recognized that the definition of a range of acceptable chromaticity co-ordinates for each colour might be useful, the majority of the Sub-Committee felt that such requirements were not necessary in transport regulations and it was decided not to include such an item in the future programme of work.

Hazardous wastes

174. The representative of UNEP (Secretariat of the Basel Convention) informed the Sub-Committee of the status of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and of the work carried out by a technical working group of the Conference of the Parties on the development of list of wastes considered as hazardous (List A) or considered as non-hazardous (List B).

OTHER BUSINESS

Transport Document

Document: ST/SG/AC.10/C.3/R.771 (United Kingdom)

175. The expert from the United Kingdom proposed to amend chapter 13 of the Recommendations in order to take account of the new ECE Recommendation No.11 on Documentary Aspects of the International Transport of Dangerous Goods (ECE/TRADE/204).

176. The Sub-Committee noted that this Recommendation No.11 had been revised in cooperation with all transport organizations, governmental or non-governmental, concerned, and that the multimodal dangerous goods declaration form which had been developed was intended to facilitate multimodal transport of dangerous goods as all items of information required by the various modal regulations could be filled in that form.

177. There was some support for to the use of the new form as a model for multimodal transport in Figure 13.4, but several experts considered that the amendments proposed by the United Kingdom in the text of Chapter 13, in particular the change from "transport document" to "dangerous goods declaration form" throughout the text was not appropriate as this would make the form mandatory through regulations which at present are more flexible and allow the use of various types of transport documents.

178. The proposals by the United Kingdom were not adopted and no decision was taken as regards the possible inclusion of a new form in figure 13.4.

Emergency response

179. The expert from the United States of America informed the Sub-Committee that as a result of a joint effort undertaken by Mexico, Canada and the United States of America, a North American Emergency Response Guide (NAERG) has been published for the purposes of assisting emergency response personnel in responding to dangerous goods incidents. The NAERG is already available in English and French and will be published in Spanish shortly.

TRIBUTE TO Mr. G.J. JEACOCKE

180. The Sub-Committee learned with regret that the current session was likely to be the last attended by Mr. G. J. JEACOCKE (CEFIC). He had attended meetings of the Committee, the Group of Rapporteurs and the Sub-Committee since 1974 and those of ECE (WP.15) and of the RID/ADR Joint Meeting since 1965, successively as member of the United Kingdom delegation, and when he retired in 1980 as a member of the CEFIC delegation. The Sub-Committee wholeheartedly thanked Mr. Jeacocke for his contribution and wished him well for the future.

ADOPTION OF THE REPORT

181. In addition to the report and its annexes, the following documents were transmitted to the Committee for consideration:

ST/SG/AC.10/R.471, -/R.473

ST/SG/AC.10-/C.3/529, -/C.3/R.552, -/C.3/R.602, -/Add.1, -/Add.2 and -/Add.2/Corr.1, -/C.3/R.613/Rev.1, -/C.3/R.635, -/C.3/R.641, -/C.3/R.651, -/C.3/R.652, -/C.3/R.661, -/C.3/R.664, -/C.3/R.670, -/C.3/R.684, -/C.3/R.687, -/C.3/R.691, -/C.3/R.705, -/C.3/R.707, -/C.3/R.708, -/C.3/R.709, -/C.3/R.710, -/C.3/R.711, -/C.3/R.717, -/C.3/R.718, -/C.3/R.725, -/C.3/R.731, -/C.3/R.732, -/C.3/R.737, -/C.3/R.746, -/C.3/R.749, -/C.3/R.760, -/C.3/R.765, -/C.3/R.770, -/C.3/R.772, -/C.3/R.776, -/C.3/R.780

Informal document: INF.37.

182. The Sub-Committee was informed that the Committee would meet from 2 to 11 December 1996, and that any submission to the Committee should be received by the secretariat at the latest on 20 September 1996.

183. The Sub-Committee adopted the report on its twelfth session and the annexes thereto.